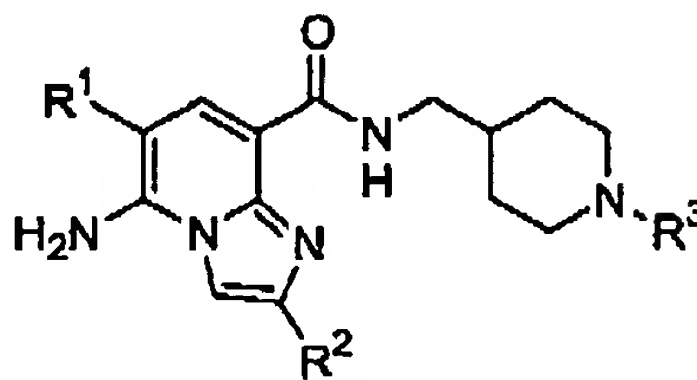


IN THE CLAIMS

Claims 1-14 (canceled).

15. (new) A compound of the formula (I):



(I)

wherein,

R¹ represents hydrogen or halogen;

R² represents hydrogen, 1 to 6 carbon alkyl, aminocarbonyl, or 1 to 6 carbon mono- or di-alkylaminocarbonyl;

R³ represents 1 to 10 carbon alkyl substituted by 1 to 4 substituents independently selected from: hydroxy, oxo, aminocarbonyl, 1 to 6 carbon mono- or di-alkylaminocarbonyl, 1 to 6 carbon alkylsulfonylamino, 3 to 8 carbon cycloalkyl, 6 to 10 carbon aryl which may be substituted by one or more 1 to 6 carbon alkyl groups, or 5 to 10 membered heterocyclic or heterocycliccarbonyl containing 1 to 4; and

wherein the compound may be in the form of a free base, a pharmaceutically acceptable salt, solvate, or hydrate.

16. (new) The compound of claim 15, wherein R¹ represents hydrogen or chlorine.

17. (new) The compound of claim 16, wherein R² represents 1 to 6 carbon alkyl, aminocarbonyl, or 1 to 6 carbon mono- or di-alkylaminocarbonyl.

18. (new) The compound of claim 16, wherein R² represents 1 to 6 carbon alkyl.

19. (new) The compound of claim 16, wherein R² represents methyl or ethyl.

20. (new) The compound of claim 15, wherein R¹ represents chlorine.

21. (new) The compound of claim 20, wherein R² represents 1 to 6 carbon alkyl, aminocarbonyl, or 1 to 6 carbon mono- or di-alkylaminocarbonyl.

22. (new) The compound of claim 20, wherein R² represents 1 to 6 carbon alkyl.

23. (new) The compound of claim 20, wherein R² represents methyl or ethyl.

24. (new) The compound of claim 15, wherein R² represents 1 to 6 carbon alkyl, aminocarbonyl, or 1 to 6 carbon mono- or di-alkylaminocarbonyl.

25. (new) The compound of claim 15, wherein R² represents 1 to 6 carbon alkyl.

26. (new) The compound of claim 15, wherein R² represents methyl or ethyl.

27. (new) The compound of any one of claims 15-17, or 24, wherein:

R³ represents 1 to 8 carbon alkyl substituted by 1 to 4 substituents independently selected from: hydroxy, oxo, aminocarbonyl, 1 to 6 carbon mono- or di-alkylaminocarbonyl, 1 to 6 carbon alkylsulfonylamino, 3 to 8 carbon cycloalkyl, 6 to 10 carbon aryl which may be substituted by one or more 1 to 6 carbon alkyl groups, or 5 to 7 membered heterocyclic or heterocycliccarbonyl containing 1 to 3 heteroatoms.

28. (new) The compound of any one of claims 15-17, or 24, wherein:

R³ represents 1 to 10 carbon alkyl substituted by 1 to 4 substituents independently selected from: hydroxy, oxo, 1 to 6 carbon alkylsulfonylamino, 6 to 10 carbon aryl which may be substituted by one or more 1 to 6 carbon alkyl groups, or 5 to 7 membered heterocyclic or heterocycliccarbonyl containing 1 to 3 heteroatoms.

29. (new) The compound of claim 15, wherein:

R³ represents 1 to 10 carbon alkyl substituted by piperidinonyl or morpholinonyl.

30. (new) A compound selected from:

5-amino-6-chloro-N-[[1-(3,3-dimethyl-2-oxobutyl)piperidin-4-yl]methyl]-2-methylimidazo[1,2-a]pyridine-8-carboxamide;

5-amino-6-chloro-N-[[1-(2-hydroxy-3,3-dimethylbutyl)piperidin-4-yl]methyl]-2-methylimidazo[1,2-a]pyridine-8-carboxamide;

5-amino-6-chloro-2-ethyl-N-[[1-(3-morpholin-4-yl-3-oxopropyl)piperidin-4-yl]methyl]imidazo[1,2-a]pyridine-8-carboxamide;

5-amino-6-chloro-2-ethyl-N-[[1-(2-morpholin-4-yl-2-oxoethyl)piperidin-4-

Patent Application
Atty. Docket No. 25302A

yl)methyl}imidazo[1,2-a]pyridine-8-carboxamide;

5-amino-6-chloro-N-[[1-(3,3-dimethyl-2-oxo-2-butyl)piperidin-4-yl)methyl]-2-ethylimidazo[1,2-a]pyridine-8-carboxamide;

5-amino-6-chloro-2-ethyl-N-[[1-(2-[(methylsulfonyl)amino]ethyl))piperidin-4-yl]]methyl}imidazo[1,2-a]pyridine-8-carboxamide;

5-amino-6-chloro-2-ethyl-N-[[1-(2-hydroxy-2-methylpropyl)piperidin-4-yl)methyl}imidazo[1,2-a]pyridine-8-carboxamide;

5-amino-6-chloro-N-[[1-(2-hydroxy-2-methylpropyl)piperidin-4-yl)methyl]-2-methylimidazo[1,2-a]pyridine-8-carboxamide;

5-amino-6-chloro-2-ethyl-N-[[1-(4-hydroxy-3,3-dimethyl-2-oxobutyl)piperidin-4-yl)methyl}imidazo[1,2-a]pyridine-8-carboxamide;

5-amino-6-chloro-2-ethyl-N-[[1-(2-hydroxybutyl)piperidin-4-yl)methyl}imidazo[1,2-a]pyridine-8-carboxamide, half oxalate salt; or

5-amino-6-chloro-2-ethyl-N-[[1-(2-oxy-2-piperidin-1-ylethyl)piperidin-4-yl)methyl}imidazo[1,2-a]pyridine-8-carboxamide;

wherein the compound may be in the form of a free base, a pharmaceutically acceptable salt, solvate, or hydrate.

31. (new) A compound selected from:

5-amino-6-chloro-N-[[1-(3,3-dimethyl-2-oxo-2-butyl)piperidin-4-yl)methyl]-2-ethylimidazo[1,2-a]pyridine-8-carboxamide;

5-amino-6-chloro-2-ethyl-N-[[1-(2-[(methylsulfonyl)amino]ethyl))piperidin-4-yl]]methyl}imidazo[1,2-a]pyridine-8-carboxamide;

5-amino-6-chloro-2-ethyl-N-[[1-(2-hydroxy-2-methylpropyl)piperidin-4-yl)methyl}imidazo[1,2-a]pyridine-8-carboxamide;

5-amino-6-chloro-N-[[1-(2-hydroxy-2-methylpropyl)piperidin-4-yl)methyl]-2-methylimidazo[1,2-a]pyridine-8-carboxamide;

5-amino-6-chloro-2-ethyl-N-[[1-(4-hydroxy-3,3-dimethyl-2-oxobutyl)piperidin-4-yl)methyl}imidazo[1,2-a]pyridine-8-carboxamide;

5-amino-6-chloro-2-ethyl-N-[[1-(2-hydroxybutyl)piperidin-4-yl)methyl}imidazo[1,2-a]pyridine-8-carboxamide, half oxalate salt; or

5-amino-6-chloro-2-ethyl-N-[[1-(2-oxy-2-piperidin-1-ylethyl)piperidin-4-yl)methyl}imidazo[1,2-a]pyridine-8-carboxamide;

wherein the compound may be in the form of a free base, a pharmaceutically acceptable salt, solvate, or hydrate.

Patent Application
Atty. Docket No. 25302A

32. (new) The compound of any one of claims 15, 30, or 31, which is formulated as a pharmaceutical composition alone or in combination with at least one pharmaceutically acceptable carrier.

33. (new) The compound of claim 27, which is formulated as a pharmaceutical composition alone or in combination with at least one pharmaceutically acceptable carrier.

34. (new) A method of agonizing 5-HT₄ receptors comprising administering to a mammalian subject the compound of claim 15, alone or in combination with at least one pharmaceutically acceptable carrier.

35. (new) A method of antagonizing 5-HT₄ receptors comprising administering to a mammalian subject the compound of claim 15, alone or in combination with at least one pharmaceutically acceptable carrier.